



Town of Concord
Board of Assessors
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The Assessment Process-FY11

December 2010

INTRODUCTION

This guide is to help you understand the mass appraisal process used to determine the property values in Concord, as well as how to read the property record card that displays information about a specific parcel's assessment for the Fiscal 2011 tax year. The tax year runs from July 1, 2010 through June 30, 2011. The assessment date is January 1st preceding the beginning of the tax year; in this case it is January 1, 2010. State law requires that the assessed valuation established for a property should represent fair market value as of that date. In other words, property assessments reflect a past value, and are not a prediction of an anticipated sale price.

Fair market valuation is based on sales that occurred in calendar 2009, the calendar year that precedes the valuation date. Standards of assessment practice set by the Department of Revenue (DOR) require a median assessment to sale price ratio of plus or minus 10% of 100% of market value for these sales. Sale prices from 2008 to 2009 showed very little movement. Note that 2010 sales activity will be reflected in the FY12 Certification Year (revaluation) values and may not be used for FY11.

WHAT IS A REVALUATION?

The DOR requires communities to value all property each year. Every third year is a complete revaluation ("reval"). Both a reval and an interim year adjustment (the two years in between the triennial revaluations) include a detailed analysis of the appropriate sales data as a basis for adjusting the property values. The goal is to keep the values as close as

possible to 100% of market value and avoid an excessive swing in the assessments in one year. A reval year includes intense examination by the DOR of all the community's assessment policies and procedures. FY2008 was the most recent reval year for Concord. FY2011 had been scheduled for a reval, but was rescheduled to FY2012. Therefore, FY2011 was an interim year adjustment year.

WHAT CHANGES HAVE BEEN MADE FOR FY2011?

Many of the changes are explained below as each section of the property record card is explained. The CAMA (Computer Aided Mass Appraisal) system is used to develop the values. CAMA tables with the factors used to calculate the values are updated each year based on the sales analysis. The factors are adjusted so that the median assessment to sale price ratio is within 10% of 100% of fair market value. The computer model created is then applied to all the properties in town to arrive at a new value for each property. For FY11 there were adjustments to several factors in the tables. There was also a significant change in the land valuation methodology (see below). The document titled "Fiscal Year 2011 Valuation Formula Changes" describes the changes from FY2010 to FY2011 in more depth.

WHY DOES EVERY PROPERTY GO UP (OR DOWN) IN DIFFERENT PROPORTIONS?

The characteristics of your property will determine how the adjustments to the factors will affect your valuation. Items such as

location, style, size, quality of construction, age and condition of the house, and lot size of the properties that were sold in 2009 are analyzed to derive multipliers which are then applied to all properties town-wide. The relative importance of these characteristics in the marketplace determines whether an owner's valuation changes.

Field review is done to check the application of these characteristics for consistency and uniformity. Properties with renovations or new construction between July, 2009, and June, 2010, will usually show an increase in their valuation.

WHEN MY NEIGHBOR'S HOUSE SELLS, WILL THEIR PRICE DETERMINE MY ASSESSMENT?

A single sale does not establish the market value of all the properties in that area. It is only by examining ALL of the arms-length sales (a willing buyer and a willing seller acting in an informed manner in the open market) that the Board of Assessors can begin to discern the characteristics of the market. If the sale of your neighbor's property is an arms-length sale and if it occurred in the appropriate year, it will be included in the analysis of all sales town-wide and will be part of the data that determines the multipliers to be used to arrive at the new valuations.

HOW WILL THIS NEW VALUATION AFFECT MY TAX BILL?

The increase in the town-wide total tax levy required to fund the budgets approved at the 2010 Annual Town Meeting is 2.6%. This increase will affect all property owners. However, the changes in your bill will also depend on changes in the assessed value of your home. The Board of Assessors does not determine how much the Town will spend for the many services it provides, but apportions the share of these costs as fairly as possible among all property owners in town.

The actual tax rate is set after the values are finalized, the Selectmen vote on the rate, and

the calculation is approved by the DOR. The FY2011 tax rate is \$13.19 per \$1,000 of valuation. The Fiscal 2011 tax year began on July 1, 2010, and two quarterly estimated bills have been issued. The new valuations are the basis for the third and fourth quarter bills due on February 1 and May 1, 2010. These two bills take into account the estimated taxes you have already paid.

HOW CAN I GET MORE INFORMATION?

Printouts listing the properties with detailed characteristics for each property are available at the Town House, the Assessors' office (24 Court Lane), the Main and Fowler Branch Libraries, and the Harvey Wheeler Community Center. This same detailed information is also available on the Town's website, www.concordma.gov under the Assessors Division. Additionally, there is a computer terminal in the Assessor's office from which you can obtain copies of property cards for \$1.00 per copy. Maps reflecting the FY2011 information will also be available. These are computerized in the Geographical Information System (GIS). They are available on line on the Town's website and at terminals in the Assessors' office and in the Planning and Land Management Department (141 Keyes Road). Also through the Town's website there is a link to Vision Appraisal Technology, Inc.'s website where Concord's property records are on-line and linked to Google maps. This site not only offers most of the information available on the property record card, but has other functions, such as listing comparable sales.

WHAT HAPPENS IF I DISAGREE WITH MY ASSESSMENT?

If you disagree with your assessment after receiving your third quarter tax bill, you may file an abatement application with the Board of Assessors. Forms are available at the Assessing Office and on the Town's website. Also in these same locations is a brochure entitled "Guidelines for Preparing an Abatement Application." By law all

abatement applications must be received in the Assessing Office no later than the third quarter payment due date, February 1, 2011 or postmarked by that same date. Applications received after that date or postmarked later than February 1, 2011 cannot by law be considered by the Board of Assessors.

HOW TO READ YOUR PROPERTY RECORD CARD

The rest of this document provides a description of the information contained on your property record card with an explanation of how the various important numbers are derived. A sample property record card is attached with the areas labeled to correspond with the following explanations. The most significant factors are (Side 1) the size and location of the land, and (Side 2) the size, style, construction quality and condition of the structure(s).

SIDE 1

The information on the front side of the card is legal and historical data about ownership, past sales of the property, previous assessments, inspection history, and current land valuation details. (The areas of the card described below correspond with the number on the sample card attached.)

Area 1 – Current Owner

Ownership information as of the most recent sale date known to the Board of Assessors.

The Record of Ownership section immediately below shows a history of ownership and sales. The column following the “Sale Date” is headed “q/u” identifying the sale as “qualified” or unqualified.” All sales are reviewed in detail to identify arms-length transactions that can fairly be used to represent the market (for both the interim year adjustments and the triennial certification). If a sale is deemed not to be an “arms-length” transaction, it is marked “U,” and the column headed “V.C.” (verification code) shows a

letter code describing the reason for the disqualification according to the DOR Non-arms Length Codes.

Area 2 – Current Assessment

This area summarizes the valuation generated elsewhere on the card for land, structures, outbuildings and extra features. Usually, the “Appraised Value” and the “Assessed Value” will be the same. In some instances, such as for agricultural land, the “Appraised Value” is the value of the property before the applicable discount. The “Assessed Value” is the taxable value, LESS the total labeled “Exempt” and “Exm Land,” which is the tax exempt portion of the property. If the parcel has multiple buildings, each building will be described on a separate card. On multi-building properties, each card might have separate land lines. The summary of assessed value is the same on each card.

Area 3 – Previous Assessments

This section shows the assessment history for the three most recent fiscal years.

Area 4 – Building Permit Record and Visit/Change History

This section lists the recent building permit activity and record of inspections of the property regarding those activities.

Area 5 – Land Line Valuation

The DOR requires property values to be divided into two parts, building and land. The land is assigned a “Use Code” according to the various property classifications provided by the DOR. These codes include single family residences, condos, multi-family residences, vacant land, commercial, industrial, special use, exempt properties and personal property.

Building Lots

Lot values are derived from the market-based data. Since there are too few vacant land sales in Concord to draw conclusions about the

value of developed land, a methodology called "land residual" is used. Using this method, the cost-based value of the structure(s) is taken from the sale price, resulting in a remaining value for the land. The square foot base rate is developed based on the size of a given lot.

When the base lot rate is identified, market data (i.e., land residuals) are plotted to develop a curve known as the "land curve." The curve is intended to reflect market activity which typically indicates that land is not bought and sold on a square foot basis; rather, the square foot price decreases as the acreage increases. In order for land to have value, it must have utility. For the purposes of property assessment, utility is the ability of a parcel to support an improvement (a structure). If only one house can be constructed on a 20,000 square foot parcel and only one house can be constructed on a one acre parcel due to a zoning restriction or some other reason, then they have essentially the same utility – the construction of one house. Although the one acre lot is more than 2 times the area of the 20,000 sq. ft. lot, the additional land has very little utility and does not justify using the same rate per square foot that would result in double the assessment of the smaller lot. The curve attempts to establish that. Although a building lot which is smaller will have a lower total lot value, it is based on a higher price per square foot.

In FY2010 zoning was removed from the formula that calculates the land value. All properties are valued per the land curve up to 80,000 square feet.

The following table lists standard lot values for FY11:

<u>Square Feet</u>	<u>Lot Price</u>	<u>\$/Sq. Ft.</u>
10,000	\$272,200	27.22
20,000	320,400	16.02
40,000	369,200	9.23
80,000	396,800	4.96

Market Areas

The value of a building lot is differentiated by location within the town. Concord is a diverse community with many different neighborhoods. To determine the value of land in Concord the Board of Assessors divides the town into several, not necessarily contiguous, Market Areas. Each Market Area groups properties together that behave similarly in the market place. Each grouping should be large enough to insure that the number of qualified sales per area is a meaningful sample for use in the sale analysis. The degree to which the market analysis shows variation by location is represented by the "Market Area Adjustment" factor. The Market Area code is found in the column labeled "ST. Idx," and the adjustment factor associated with that Market Area is in the column labeled "Adj."

There are 13 Market Areas used for residential properties. For FY2011 one major change to the land valuation calculation was shifting the median Market Area. The median area with the factor of 1.00 should be where the median sale price is found. Over the past several years that location had shifted. This change resulted in all the Market Area factors being lowered for FY2011 and the square foot cost on the land curve being increased. For most properties this resulted in no significant change in value. The streets listed below are the various FY11 Market Areas.

<u>Market Area</u>	<u>Adj.</u>
21 Annursnac Hill/Conantum	0.78
22 Bedford St./Old Bedford Rd./ Virginia Rd.	0.76
23 Old Marlboro Rd./ ORNAC/ Thoreau School area/Conantum	0.90
24 Concord Center/Elm St./ Author's Ridge	1.45
25 Lowell, Strawberry Hill,	1.01
26 Monument St./ Estabrook Rd.	2.25
27 Plainfield Rd./White Pond area	0.82
28 Southfield Rd./Sudbury Rd./ Baker Ave./Cambridge Tpk./ Macarthur/Adams/Park	1.00

<u>Market Area</u>	<u>Adj.</u>
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29 Thoreau Hills	0.73
30 West Concord	0.81
31 Nashawtuc Hill Area	2.55
32 East of Concord Ctr/Lower Monument St.	2.02
33 Garfield & Fairhaven Hill Rds./Mattison Farm	0.90

Concord is so diverse, however, that in some years sales show there are different land values within some Market Areas. These unique areas are identified from the qualified sales and an additional factor is applied to that area called a Site Index. This is a number by which the land value is multiplied to adjust for the difference associated with a sub area within a Market Area. As with a Market Area factor, a Site Index factor may increase or decrease the land value in a sub area. The Site Index code is in the column headed "S.A." and the actual factor is in the column headed "I. Factor." The following table lists the residential Site Indices.

<u>Site Index</u>	<u>Land Value Multiplier</u>
1	0.80
2	0.85
3	0.90
4	0.95
5	1.00
6	1.15
7	1.25
8	1.40
9	1.50

Excess Land

If there are additional lines in the Land Line Valuation Section, they may reflect additional building lots or "excess land." Excess Land is that portion of the parcel that is over and above 80,000 square feet. All excess land is valued at \$40,000 per acre modified by the market area adjustment factor. This price is also a result of the sales analyses undertaken by the Board of Assessors.

In the example card, the first line of 80,000 square feet is valued as follows:

$$\begin{aligned} &\$4.96 \times 1.01 = \$5.01 \\ &\$5.01 \times 80,000 \text{ sq. ft.} = \$400,800 \\ &\text{(values are rounded to 100)} \end{aligned}$$

In cases where there are unusual circumstances unique to a certain parcel, a further multiplier called a Condition Factor can be used. These, too, can be either negative (e.g., railroad, easement) or positive (e.g., river view, vista).

In summary, land value is determined based on size of the lot as well as by considering the influence of location within the town and within the Market Area, along with any unusual influences requiring the use of a Condition Factor.

Wetlands

Occasionally a town will use some sort of discount factor in recognition of the assumed diminishment of value that having proportionately more wetlands than the average lot provides. In Concord, prior to FY2011 there was a lower rate used for some excess land called a "wetlands" rate. The Board had been studying the use of this rate and noted two issues: One was that this lower rate was applied inconsistently across town. Much of Concord is technically considered to be "wetlands," but only a small minority of properties used this rate to calculate their land value. There were many situations where there were similar lots in an area but only one or a few benefited from the lower rate while the remainder used the full excess land rate, even though the amount of wetlands on their properties was very similar to their neighbor's parcel that had the discount. The second issue the Assessors found was that utilizing a discount for a wetlands area did not seem to be supported by sales prices. They studied sales from the last few years and could find no correlation between properties with significant wetlands and ones without. Therefore, as of this year this low rate is no longer used in the valuation formula. If a parcel has significant wetlands, mainly in the form of standing water such as a pond, a condition factor that modifies the excess land value is used to

designate the lower utility. This applies to less than 20 parcels in town.

Whatever rate or factor is used in the land valuation calculation, it must be supported by sales activity, and not based on the opinion of a person or persons.

SIDE 2

The second side of the Property Record Card shows all of the details used in valuing the structure(s), including outbuildings (attached to the land, such as a shed or pool) and extra features (attached to the building, such as a fireplace or whirlpool). A diagram of the principal structure with the measurements used for the replacement cost calculation is also shown. Abbreviations used in the sketch are explained in the Building Sub-Area Summary Section at the bottom of the card (see Area 8).

There is a lot of information on this card, but there are four elements that can be considered the most important contributors to the structure value.

- A. Effective Area -- used for replacement cost of building
- B. Style -- determines base rate per square foot to build that style of building in eastern Massachusetts, as adjusted for Concord based on the market analysis
- C. Grade -- quality of construction
- D. Dep Code -- normal physical depreciation based on the current condition of the structure given the actual year built (AYB).

Area 6 -- Construction Detail

Each construction detail has a code and a description. The principal elements are described below.

Style -- For single family structures, there are ten basic styles of houses. Each style has a corresponding "base rate" which is the current estimated new construction cost per square foot for this region of the country as reflected in the market. This information is obtained

from the published construction industry data commonly used for this purpose, modified by the Concord sales analysis and discussions with local builders and architects. The styles and base rates for single family residences are listed below:

<u>Code</u>	<u>Style</u>	<u>Base Rate</u>
01	Ranch	\$ 90
02	Old Style	150
03	Colonial	117
04	Cape Cod	110
05	Bungalow	85
06	Conventional	140
07	Contem/Modern	104
08	Raisd Rnch/Splt Lvl	90
60	Century (F,R,V)	170
100	Custom	170

Grade -- This element is a measure of the construction quality -- the types of materials used and the quality of workmanship. The grade of a house generally does not change except as a result of major renovations. The exception to this is during a revaluation or system upgrade where there are significant changes to this and other tables. The grade factor is a significant contributor that modifies the unadjusted base rate. The grades and their corresponding weights are:

<u>Code</u>	<u>Grade Factor</u>
01	0.65
02	0.80
03	1.00
04	1.10
05	1.20
06	1.35
07	1.50
08	1.70
09	1.80
10	1.95
11	2.10

Area 7 -- Sketch

The diagram of the principal structure shows outside dimensions. The different areas are identified by codes reflecting the utility of the area that are further described in the bottom left section of the card. In some cases a

diagram will not appear but a box with the code and square foot area will be used. The different areas are stacked, so an area label may not apply to the entire sketch.

Area 8 – Building Sub-Area Summary

Each part of the structure identified in the sketch will appear in the bottom left section of the property record card, showing the Living Area, Gross Area, and Effective Area. Only the Effective Area is used in the assessment calculation. Primary living areas count as 100% of the gross area; all other spaces count at less than 100%. The principal sub-area types and effective area percentages are:

<u>Code</u>	<u>Description</u>	<u>Percent</u>
BAS	First Floor	100%
DCK	Deck	10
EAF	Attic expansion, finished	35
EAU	Attic expansion, unfinished	25
FAT	Attic, finished	20
FBM	Basement, finished	35
FCP	Carport	20
FEP	Porch, enclosed	60
FGR	Garage	40
FHS	Finished ½ story	50
FOP	Porch, open	20
FQS	Finished ¾ story	80
FSP	Porch, screened	45
FST	Utility, finished	50
FUS	Finished upper story	100
PTO	Patio	5
SFB	Walkout lwr lvl finished	60
STP	Stoop	5
UAT	Attic, unfinished	10
UBM	Basement, unfinished	20
UST	Utility, storage	30

Size Adjustment Factor – This factor does not display on the card but is used in the calculation of value of the building. It is based on economies of scale and market inclination. Typically, if all else is equal, the smaller the structure, the greater the cost per square foot, and vice versa. However, this factor is also affected by the market indications and what is desirable to current buyers. This factor increases the square foot price at the low end and reduces it at the high end. The baseline

used is the median home size in Concord of 2,700 sq. ft. of effective area.

Area 9 – Cost/Market Valuation

This box, in the middle of the card to the left of the sketch, shows the calculation of the depreciated building cost. The Adjusted Base Rate is derived by multiplying the Base Rate, as adjusted for certain elements under the Construction Detail section, by the size adjustment factor and the Grade Factor. The Adjusted Base Rate is multiplied by the Effective Area, and flat value amounts for certain items under the Construction Detail, such as bedrooms and bathrooms, are added to the total. This results in the Replacement Cost New (RCN).

Actual Year Built (AYB) and Effective Year Built (EYB) – The EYB is derived from the AYB according to the Dep. (Depreciation) Code. Very old structures may have been renovated over the years. Newer structures might have deteriorated beyond their normal wear and tear. This value is a judgment of the relative “age” of the structure for depreciation purposes. It is further refined based on the observed condition of the improvements, resulting from a field inspection. The condition is identified alphabetically and is linked to a depreciation table for consistency. Depreciation is a curve with minimum percents for each level of condition below which no property would normally ever fall, displayed as Dep %. Depreciation Codes are:

<u>Code</u>	<u>Description</u>
P	Poor
F	Fair
A	Average
G	Good
VG	Very Good
E	Excellent

On the sample card the depreciation is Average, which results in normal physical depreciation of 15% based on 1982, the year of construction.

Sometimes unusual circumstances require a further discount for Functional Obsolescence

(something significant is wrong with the structure that is too costly to fix) or for Economic Obsolescence (an external influence that has a negative effect on the property). These discounts are rarely used.

The total Appraised Value of the structure (rounded) is derived by multiplying the RCN by the Overall % Condition (100% - Dep %) as of January 1, 2010. A more detailed cost report showing the actual formula used for each property is available in the Assessors' office.

Area 10 – Outbuildings (L) and Extra Features (B)

This section lists the additional structures on the parcel or extra features within the building. The Units column is either the size in square feet or the quantity of the described feature, and the Unit Price is either its cost per square foot or the unit value. For outbuildings, the year (Yr) is the year the structure was built. For extra features (e.g., fireplaces), the year is assumed to be the same EYB as the primary structure.

Area 11 – Appraised Value Summary

This section on the front of the card on the right totals the Appraised Bldg. Value, XF, OB, and Land to arrive at the total parcel value.

A NOTE ON THE VALUATION OF CONDOMINIUMS

There are 740 residential condominium units in town. Condominium valuation differs from the “market adjusted cost approach” employed for the approximately 4,570 single family residences. Generally, condominium units will not have a land assessment. Since the land is held in common, all of the market value of the condominium must be reflected in the per square foot price applied to the effective area of the structure. The calculation of value is based on location, unit size, bed/bath count, grade, construction detail, condition, etc., similar to single family residences as described above.

Condominium valuation is also based on the sales approach to value. Individual units are matched to similar units that have sold and factors adjusted accordingly. Condominiums in converted houses cannot be compared to single family or two-family buildings, but must be valued based on sales of similar types of property. The creation of a condominium generates a new form of ownership which usually adds value to the building. In general, condominium sales prices show more volatility from year to year than single family residences.

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